OLDEST BEE PAPER IN AMERICA

THE AMERICAN BEE JOURNAL

ESTABLISHED IN 1861

VOL. XIX. CHICAGO, ILL., OCTOBER 10 1883. No. 41.

THE AMERICAN BEE JOURNAL

Published every Wednesday, by

THOMAS G. NEWMAN,

EDITOR AND PROPRIETOR.

☞ Next week the annual re-union of bee-keepers will be held in Chicago. The present indications are that it will be most interesting and largest gathering ever held in the Northwest. Many of the prominent apiarists in this region have already indicated their intention of being present, and we think that no one who can possibly attend, should be absent. The Rev. L. L. Langstroth writes us that his health and energy is a surprise to himself as well as his friends, and he fully intends to be present. The invitation is cordial and universal—COME.

☞ Mr. M. L. Trester, Secretary of the Nebraska State Association, has sent out blanks to be filled up by the bee-keepers of that State, giving the statistics necessary to the proper estimate of the honey crop in that State. This is commendable, and should be followed by similar efforts in all the States. Will the secretaries please take the hint?

☞ The trial between exhibitors making comb foundation at the Tri-State Fair, was quite an attraction. We met Messrs. Vandervort and Pelham for the first time, and were well pleased with them and their machines The Given press also did excellent work, and was admired by all who saw it. Dr. Besse had a good exhibit of honey and supplies, and added largely to the interest of the show. E. T. Lewis & Co.'s exhibit was large and varied, and the faithful services of Mr. Puhl, in showing the different articles to visitors, made it very attractive to bee men.

Honey Harvest in Scotland.

From a letter just received from Mr. J. D. Hutchison, of Glasgow, Scotland, we glean the following concerning the honey harvest of that country. There, as well as in America, the early frosts and cold and wet weater have ruined the fall crop of honey. Mr. H. says:

From the accounts which have been received from various parts of Scotland, it appears that the honey harvest is to be an almost entire failure. Owing to the late spring, bees had to be fed to prevent their starving. Although they bred well and swarmed numerously, the wet and cold weather that prevailed during almost the whole summer hindered the storing of honey. After a bad summer there is generally the prospect that in autumn the heather will aid in making up the deficiency, but this year, unfortunately, this hope will not be realized, as the heather yields little or nothing.

Bee industry is now becoming more generally cultivated, and in average years is highly productive. The weather has been very broken for sometime past, so the most of bee-keepers have taken home their bees from the heather, and are preparing them for the ensuing winter.

☞ Concerning the bee and honey exhibits at the St. Louis Fair, Messrs. Flanagan & Illinski, of Belleville, Ill., writes as follows:

The show of bees and honey at the St. Louis Fair was superior to that of last year, being much more extensive and in better order, and more exhibitors taking part. Wm. Little, of Marissa, Ill., had 1st and 2d premium ($20) for the best display of Italian bees. Mr. E. Armstrong, of Jerseyville, Ill., obtained 1st premium on the best crate of honey, and his display certainly deserved it. Your humble servants got the 1st premium for the best display of apiarian implements. Three years ago not one hive or bee or crate of honey were exhibited, but this year there was a display that was attractive to all visitors to the Fair. Your "Honey as Food and Medicine" went like hot-cakes. The management have our thanks for the privilege of selling honey during the Fair; a privilege not accorded heretofore.

The New Postal Laws.

As many are in doubt about the new regulations of the Post Office Department, and to save trouble to our subscribers, we will recapitulate them:

The postage on letters is 2 cents for each half-ounce or fraction thereof.

The old two and three-cent stamps now in use will continue valid, and must be accepted in payment of postage whenever offered in appropriate amounts.

Postage to foreign countries remain unchanged, with the exception of Canada. A letter goes to Canada for two-cents; but Canadians have to pay three-cents for a letter to the United States as formerly.

The drop-letter rate of postage remains the same—that is, two-cents per half-ounce or fraction thereof, at free-delivery offices, and one-cent at all other offices; and no changes are made in the rates of postage on second, third and fourth-class matter.

An item has been going the rounds of the papers, to the effect that a late order of the Postmaster General provides that no package, parcel or letter will be forwarded upon which the postage has not been fully paid. This is erroneous, as no such an order has been issued. Letters weighing over one-half ounce, on which one full rate has been paid, will be forwarded, and the balance collected on delivery. If a letter contains a one or two-cent stamp, or no stamp at all, it will be returned to the sender if he is known, and otherwise the person to whom it is addressed will be notified, and upon receipt of the postage the letter will be forwarded.

☞ Mr. A. Benedict had at the Tri-State Fair an observatory hive with some of the most beautiful bees we ever saw—well marked and of a uniform and large size—the result of 20 years of careful breeding.

Treatment and Cure of Foul Brood.

The London *Journal of Horticulture* contains the following on the above subject:

A correspondent, some time ago, sought information on this subject. So far as I know no more valuable hints and instructions have appeared than in the columns of the *Journal*, and especially I would direct attention to what has been written by Messrs. Cheshire and Cowan. From these writings I will cite. Mr. Cheshire observes—"When foul brood breaks out it attacks grubs only, and for a fortnight or so no actual difference is effected, but as it spreads population is reduced from two causes: Young bees do not all hatch out, some die prematurely, and the odor generally diffusing itself takes all heart and energy out of the workers; the brood-nest gets by degrees choked, and the laying energy of the queen is thus repressed. The general effect is the gradual weakening of the colony it is true, but all can see that time is required for the destroyer to accomplish his purpose, and despite his sad work making havoc within, the bees may appear to be in the full swing of unhindered progress until the disease has a firm hold of every comb.

"The curability of foul brood is the next point upon which I wish to insist. While we feel sure that the doctor can do us no good, we will not take his medicine, and while bee-keepers believe that foul brood must run its course and work out devastation and ruin nothing will be done to arrest it. I assert its curability because I have again and again cured it, and in this position I am pleased to be able to refer to one of the most prominent, certainly one of the most scientific and successful apiarists of our day—T. W. Cowan, Esq., chairman of the committee of the British Bee-Keepers' Association, whose experience in the treatment of this malady has been great, but not greater than it has been successful. Mr. Cowan, in reply to a request that he would permit a publication of his methods, has favored me with a lengthened letter, in which he says, 'I am quite, I think, of your opinion as regards foul brood, that is to be cured if attacked in earnest. You know I had it in my apiary, and it was a source of great trouble to me, but I stamped it out with salicylic acid. My proceeding was to excise any very bad places, and when I found cells affected here and there I merely uncapped them and sprayed the combs with the solution of which I send you the recipe. I found generally in mild cases one application was sufficient, but in more severe ones two or three doses produced a complete cure. I found that if the cells were uncapped before they were punctured and sprayed with the solution, injecting a larger quantity into the affected cell so as to eject the viscid mass, there was no fear of the disease appearing again. In this state the viscid fluid in the cell is of a light brown, and is not permeated with spores to such an extent as when it is allowed to remain until it becomes highly colored, and the covering much depressed. I doubt very much if in this stage it is very contagious. I have no doubt the acid acts on the spores and destroys their vitality. So far so good. Now as regards the honey that is in the hive, and which is supposed to contain the spores (although I must say I have never been able to detect any by the microscope), how are we to insure their being destroyed? Simply by uncapping it and feeding the bees on syrup containing the acid, which they will store with the uncapped honey, or uncap it and give it a good spraying with the acid solution. I have done both, but cannot say if it was really required; but as I think prevention is better than cure, and as it is not much trouble, there can be no harm done.

"'All my hives are scalded, and so is everything that has had anything to do with the hive, and afterwards everything is washed over with the solution. I believe the germs of the disease are carried in the air, and we can feel safe; I, therefore, always put acid in all the food I prepare. I examined six of my hives, and all were healthy but one, and that I thought was also healthy. It was an early swarm. This year I had thrown off a swarm and a cast, and had given me six small one-pound sections nicely filled. I looked on the ten frames and found no queen and no brood. There was one cell covered, but not punctured, but I at once recognized as a foul-broody one. Now the hive had not been queenless very long, as about ten days ago I saw the queen; and, although, she was not laying, there was a small quantity of brood hatching out, and all did hatch out except this one cell; it was uncapped and injected with the solution, and the other combs and bees sprayed with it. I have no doubt it will prevent its spreading in the future, as I shall not hesitate in using these combs in uniting if I require them.

"'I have examined six hives to-day, fearing to find foul brood, but have not detected a single cell in any of the other hives. Now, how did this appear? It seems to me probable that it was brought there by some of the bees from outside, or a spore might have been lurking in some of the corners of the hive and had escaped the solution. This proves to me that it is impossible to tell when it may break out in an apiary; and as we know from experience that salicylic acid destroys the spores, I think it not only beneficial but important that a certain quantity of this acid should be in all the food given to the bees. Two years ago I tried feeding the bees on syrup containing a strong dose of acid without spraying the combs, and I found that the disease gave way to this treatment; but I find the other plan, that of uncapping and spaying, the most rapid. I do not mean to say if a hive is neglected, so that all the brood is rotten, it can be cured; but if taken in time, as every apiarist would do, it has been and can be cured. THOS. WM. COWAN.

The table of recipes Mr. Cowan encloses will explain themselves.

Salicylic acid solution for mixing with syrup for feeding bees, painting over hives, and spraying combs, etc., for the prevention of foul brood.

Water	4 pints.
Salicylic acid	1 oz.
Soda borax	1 oz.

Spring and summer food for bees:—

White lump sugar	10 lbs.
Water	7 pints.
Vinegar	1 oz.
Salicylic acid solution	1 oz.
Salt	½ oz.

Boil for a few minutes.

Autumn and winter food for bees:—

White lump sugar	10 lbs.
Water	5 pints.
Vinegar	1 oz.
Salicylic acid solution	1 oz.
Salt	½ oz.

Boil for a few minutes.

Northwestern Convention.

The Northwestern Bee-Keepers' Association will hold its fourth annual convention at Owsley's Hall, N. W. corner Roby and West Madison Sts., Chicago, Ill., on Wednesday and Thursday, October 17 and 18, 1883, commencing at 10 a. m. on Wednesday and holding five sessions.

The Rev. L. L. Langstroth (the father of American apicluture) has promised to be present, and many of the most prominent apiarists of the Northwest will be there and aid in the deliberations and discussions.

This meeting will be held during the last week of the Inter-State Industrial Exposition, and reduced railroad fares may be had on nearly all the railroads. A cordial invitation is extended to bee-keepers every where to attend this annual reunion.

Meals may be obtained at the Restaurant near the Hall at 25 cts. each.

Beds may be secured at the Gault House for $1, or at other Hotels at regular rates.

THOS. G. NEWMAN, *Sec.*
C. C. MILLER, *Pres.*

☞ "Take me out to see your hybrids," was the label on a mammoth smoker exhibited at the Tri-State Fair by Messrs. E. T. Lewis & Co., Toledo, Ohio. It was about 2 feet high, and proportionate otherwise, with a whistle and an organ, to make music as operated. It caused many an audible smile among the bee men who examined it.

☞ Please announce that the Iowa Central Association, will meet at Winterset, Iowa, Nov. 2, 1883.

Z. G. COOLEY, *Sec. pro tem.*

Bees in a Religious Meeting.

A correspondent of *Farmers' Home Journal*, in the following letter, tells how a congregation was warmed and sinners made active, lately, in Kentucky, by a swarm of bees:

"You may have read the story of Sut. Lovingood's dad in a hornet's nest, but that affair was not a circumstance to what took place at the Methodist church in Lafayette, Ky., on last Sunday. Your correspondent was not present, and feels glad that he was not, but has the facts from a reliable gentleman who experienced the quickening power from the business end of a bee, which he thinks would rival the eloquence of Beecher or Spurgeon in stirring up a sleepy congregation.

"Rev. J. W. Bigham, the good pastor and eloquent preacher, occupied the pulpit. Whether or not he needed any assistance in warming up his congregation, as preachers like to do, just before conference meeting, he got it, in the form of a swarm of angry bees. The atmosphere seemed alive with the insects. They poured into the house by wholesale, precipitating a revival. Sleeping members were aroused from their slumbers to a shouting pitch, before the preacher reached the point in his sermon where the shouting should come in, and the sermon was cut short. The spirit (or rather the bee) soon pervaded the entire congregation, and the ladies also were quickened to a sense of the awakening, losing all care for their bangs and curls. Never did worshipers assume a more humble attitude. All who could, crawled under the pews, while those made excessively warm by an inspiring touch from the sweet singers, continued in the more lively exercise. Real solid joy, however, did not take possession of the congregation until the doors and windows were all closed, and the regular battle of bee-killing was over. The bees were finally stopped out of the house, when they commenced on the horses and men out doors. A number of horses broke loose and ran away. Mr. John W. Davidson had a fine buggy torn to pieces by his horse trying to escape from the bees. A pair of fine bay horses, belonging to Mr. Ed. Moses, standing to the breast yoke with loose traces, and hitched with very strong halters, were literally stung to death; one of the horses died on the spot in less than two hours. Several horses were stung so badly that they could not move from the place when cut loose. Messrs. John Covington, Ed. Moses and others were badly stung in trying to rescue their horses.

"Brother Bigham closed the services by announcing that there would be a meeting next Sunday at the usual hour, provided the bees should settle. The ladies, however, had to remain in, with closed doors, until a bolt of musquito goods was procured for veils. One lady concluded she could run the blockade—she was not afraid of bees any way; but she had never come in contact with a swarm of missionary bees, and never knew how beautifully she could perform, until she met these red-hot ministers.

The National Convention.

Mr. C. F. Muth has sent us the names of the members attending the North American Bee-Keepers' Society at Toronto last month. They are as follows, and 101 in number:

CANADA.—W. F. Clarke, F. Malcomb, Rev. F. Allen, S. T. Pettitt, John Myers, S. C. McNeil, James D. Long, S. Corneil, R. McKnight, R. Harper, Mr. and Mrs. Robert H. Myers, J. B. Hall, J. E. Schantz, John Baxter, Mrs. Wm. Bryce, Rev. Wm. Blain, A. G. Willows, H. A. Russell. W. Ellis, A. Crichton, H. Dobson, C. D. Corbin, A. D. Allen, S. Wood, O. Snyder, A. Grove, E. Mullholland, A. Douglas, G. B. Jones, W. H. Morrison, I. P. Blakeley, W. Nixon, H. Lipsett, Rev. J. R. Black, J. Anderson, Mr. and Mrs. S. G. Holly, W. C. Wells, Wm. Buglass, A. E. Gilpin, Chas. T. B. Jones, W. G. Russells, Mrs. W. G. Russells, Miss Edith Russells, Jacob Spence, Mrs. Jacob Spence. In all, 47.

NEW YORK.—W. E. Clark, D. Baker, J. C. Newman, T. Pierce, G. W. House, J. E. Stanley, G. W. Stanley, R. Baker, D. A. Parmeston, Mr. and Mrs. E. B. Ross, W. V. Bosworth, Jr., H. F. Gates, W. H. S. Grout, H. S. Elkins, F. L. Smith, W. T. Falconer, L. Whitford, C. Humphrey, M. L. Spencer, S. L. Sleeper, L. Corey, E. C. Hubbard, J. H. Umpleby, Mr. and Mrs. W. L. Coggshall, W. E. Moulton, Ira C. Nicholl, Mr. and Mrs. C. Favill. In all, 30.

OHIO.—C. F. Muth, A. I. Root, G. W. Freeman, F. Whiteside, Dr. H. Besse, Miss May Besse. In all, 6.

MICHIGAN.—Prof. A. J. Cook, Dr. C. E. Rulison, R. S. Taylor, Wm. Moorhouse, W. Harmer. In all, 5.

TEXAS.—Judge Andrews.

KENTUCKY.—W. C. Pelham.

GEORGIA.—Dr. and Mrs. J. P. H. Brown.

COLORADO.—W. L. Porter.

FLORIDA.—W. S. Hart.

MASSACHUSETTS.—S. M. Locke.

NORTH CAROLINA.—G. E. Boggs.

IOWA.—Mr. and Mrs. O. O. Poppleton.

ILLINOIS.—Dr. C. C. Miller.

PENNSYLVANIA.—C. J. Haight, J. McGonnell.

The life members, having paid $10 each for such membership, are D. A. Jones and Thos. G. Newman.

There are several honorary members of the Society, and among them the Rev. L. L. Langstroth. The names of the others may be gleaned from former reports.

In 1880-81, the list of members contained 105 names.

☞ Articles for publication must be written on a separate piece of paper from items of business.

Honey and Beeswax Market.

OFFICE OF AMERICAN BEE JOURNAL,
Monday, 10 a. m., Oct. 8, 1883.

The following are the latest quotations for honey and beeswax received up to this hour:

CINCINNATI.

HONEY—Our prices are 7@9c. for extracted, and 14@16c. for comb honey on arrival.
BEESWAX—Arrivals of beeswax are good at 25@28c., and the demand is fair.
CHAS. F. MUTH.

NEW YORK.

HONEY—White clover and basswood in 1 and 2 lb. sections, 17@21c. Dark and second quality, 14@15c.; extracted white clover in kegs and barrels, 9@10c.; dark, 8c.
BEESWAX—Prime yellow, 27@29c.
H. K. & F. B. THURBER & Co.

CHICAGO.

HONEY—Comb honey has sold freely for the past two weeks, and stocks are at present low. 1 lb. sections of white comb are bringing 18c.; 1½ to 2 lb. sections of same quality, 16@17c.; various sized sections of white comb, 15@16c. Extracted honey from 8@10 cts. per pound, according to body and flavor.
BEESWAX—Yellow, 32@33c.; dark, 25c.; medium, 30c.
R. A. BURNETT, 161 South Water St.

SAN FRANCISCO.

HONEY—There is a fair jobbing trade. Offerings are not large. Choice qualities command extreme figures. White to extra white comb, 16@20c.; dark to good, 10@13½c.; Extracted, choice to extra white, 8@9½c.; dark and candied, 6½@7½c.
BEESWAX—Wholesale, 27@28c.
STEARNS & SMITH, 423 Front Street.

ST. LOUIS.

HONEY—Quiet. Salable at appended figures, but generally held higher. Strained and extracted at 6½@7c.; comb at 14c.
BEESWAX—Ready salable at 25@26c. for prime.
W. T. ANDERSON & CO., 104 N. 3d Street.

CLEVELAND.

HONEY—Comes very slowly and sells as fast as it comes at 18@19c. for best white in 1 lb. sections, and 17@18c. for 2 lb. sections. Second quality is very slow. Extracted usually sells very slowly in our market.
BEESWAX—None in Market.
A. C. KENDEL, 115 Ontario Street.

BOSTON.

HONEY—We quote our market at 18@20c. for 1 lb. white clover; 18@20c. for 2 lb. white clover. Extracted, 8@10c.
BEESWAX—We have none to quote.
BLAKE & RIPLEY, 57 Chatham Street.

KANSAS CITY, MO.

HONEY—A large part of the local crop in this section has been marketed, though considerable remains yet in the hands of producers. Very little California honey in this market this season, except extracted, which is in fair supply at 10@11c. for choice new, and 8½@10c. for dark or candied. Choice bright comb 2 lb. sections, 18@19c.; 1 lb. sections, 19@20c. Demand is fair for the better grades.
JEROME TWICHELL, 530 Delaware Street.

☞ The next regular meeting of the Mahoning Valley Bee-Keepers' Association will be held at Newton Falls, O., on the first Saturday of November, 1883. L. CARSON, *Pres.*
E. W. TURNER, *Sec.*

☞ The Bee-Keepers' Association of Central Illinois will hold its next meeting on Wednesday, Oct. 10, at 10 a. m., at 205 South Main street, city of Bloomington. All interested, in this and adjoining counties, are invited to attend.
J. L. WOLCOTT, *Pres.*
JAMES POINDEXTER, *Sec.*

CORRESPONDENCE.

For the American Bee Journal.

The New Races of Bees.

G. M. DOOLITTLE.

About a year ago I gave my opinion regarding the Cyprian and Syrian bees, stating that I should not have anything more to do with the Cyprian on account of its vindictive disposition, and although not favorably impressed with the Syrian, I should give them a more thorough trial during the season of 1883. To this end I procured queens of the Syrian or Holy Land race of three different breeders during the fall of 1882, so I could have full colonies of those bees in time for the honey harvest.

The result of this season's work with them proved the same as that of 1882, which is, that for this locality the Holy Land bees are practically good for nothing as honey gatherers. With a locality where there was a steady flow of honey the case might be different, but here we get little or no honey until basswood, and these bees seem to think that a large flow of honey should mean lots of brood, so at brood-rearing they go, the result of which is, nearly all the honey they gather is used up rearing an extraordinary amount of brood, which hatch so late in the season that the bees from said brood are too late to gather honey, hence become consumers of the little honey already in the hive. Therefore, when fall arrives, we have a hive overflowing with bees, with little or no honey, and scarcely a pound of surplus to recompense the owner. All are aware of my views regarding the secret of honey-producing, lying in, getting the bees just in the right time for the honey harvest (neither too early or too late), that being of more moment than any one other thing pertaining to honey producing.

That the Syrian bees cannot be thus managed in this locality is the reason of my saying they are practically good for nothing. Then they have another exceedingly bad feature, which is, that before the young queens are fertilized in the present hive, which has cast a swarm, fertile workers spring up, and the result is a queenless colony, unless great pains are taken to introduce a laying queen. This, with me, as I allow natural swarming, would be a very serious drawback, but might be got along with if they were enough better honey-gatherers to warrant an extra outlay of time in looking after the young queens. However, as in all respects, unless it is in wintering, they are inferior to the Italians. I felt warranted in doing away with them entirely, and to-day finds my yard without a Holy Land bee in it.

After deciding a year ago that I would have nothing more to do with the Cyprians, I thought, perhaps, I had been a little hasty, as I had up to this time but one queen of that race in my yard. As a whole, I was pleased with them, except their great disposition to sting whenever the hive was opened. When spring opened I found that my Cyprian colony had wintered the best of any colony I had except the old Holy Land colony, and hearing so many favorable reports of the Cyprians, I concluded to give them a further trial. Consequently I procured a queen of B. F. Carroll and E. T. Flanagan, as they seemed to prefer them to any other bees. These, with my old one, made 3 colonies, and as far as getting the bees in the field in time for the harvest, I am well pleased with them; as in fact I am with all other points about them except the "stinging point."

If I could call the queen I had from Mr. Flanagan pure, I should think there was some prospect of getting peaceable Cyprians, but she evidently is not pure, for her queen progeny is of a mixed multitude, being all the way from jet black to as golden yellow as I ever saw an Italian queen, while the daughters of the Corroll queen, and from my old colony, are nearly duplicates of the mother. The bees from the Carroll queen are the worst to sting of any bees I ever saw, and I thought the original colony was bad enough. Mr. Carroll says, in a late number of the BEE JOURNAL, that he has Cyprian bees which he can handle without smoke, veil or gloves, but he does not tell us whether he considers them pure or not; neither does he tell us how many colonies he has of the stamp produced by the queen I got of him.

Now, Mr. C., in all candor, and desiring information, I ask how you manage such bees as the queen you sent me produces. That you knew they would sting is proven by your saying when you sent her, that if she proved too "firey," I could send her back. Perhaps I may do so in the spring, when even the Cyprians can be handled quite comfortably, but I would not open that hive to-day to get that queen for all the queens of like stamp there is in the world.

Mr. T. S. Bull, a large bee-keeper of Valparaiso, Ind., called on me not long ago, and I told him of these bees. As he wished to see them, I took off the cover to the hive and raised the quilt a little, smoking them all the while, but for all that a cloud of angry bees rose in the air, crawling into our pockets, under veils, and where ever they could get, all the time singing such a sweet tune, like an angry bee can when he gets in your hair. They seem to care nothing for smoke, and how any one can manage them for extracted honey, is more than I can understand. I worked them for comb honey, and to say that I was glad when I had the sections off that hive does not half express it. In shaking the sections to rid them of bees, nearly all the bees would take wing and come for me like so many angry hornets; and, although I care little for stings, I confess that my flesh fairly crawled at the sound of a quart or more of angry bees hissing about my bee-veil, and occasionally stinging through pants and shirt.

Now, if any one can tell how I can manage these Cyprian bees from the time the honey harvest commences until winter, I shall be glad to keep a part of Cyprians in my apiary, but if they cannot, I shall have to bid them adieu, for their stinging qualities more than over-balance all their good traits.

Borodino, N. Y.

For the American Bee Journal.

Winter Ventilation and Protection.

DR. G. L. TINKER.

The experience of bee-keepers appears to be widely different on the proper size of the entrance of a hive in out-door wintering. One will tell you to make it not larger than ⅜ by 4 inches; another ⅜ by 8 inches; and still others recommend ⅜ by the width of the hive inside. My own recommendation for a full colony is to make the entrance ¾ by 8 inches.

To keep out mice, set the hive on a stand made as follows: Make a box 4 inches deep, just the size of the bottom of the hive, out of heavy boards 4 inches wide. If the side boards are 5 inches wide, the bottom can be nailed inside into rabbets made in the lower edge of the front and rear pieces. The stand looks better if the bottom is nailed inside. Lastly, nail four pieces 3 inches wide by a foot long to the front and rear corners. These pieces should be planed smooth, and all ought to be painted. Now set the stand on four bricks let into the soil on a level, and fill quite full of dry sawdust. Sit on the hive and move about until it fits firmly. There is very little danger from mice to a colony on such a stand, and besides, it is far more convenient for the bee-keeper. No sawdust or other material need be put around the hive to keep down weeds, for the weeds will grow anyway, unless the sawdust is often removed. The scythe is the best thing to keep down the weeds and grass. The stand also keeps the hive up from the ground, so that there is less danger from dampness. Again, a lot of hives set on these stands presents a very neat appearance. Heretofore I have had my hives set near the ground upon bricks, and I find that there are many disadvantages in having them set so low down.

My reason for so large an entrance is, that bees require a large amount of fresh air in winter, and the most natural point for the air to reach them is through the entrance. There is nothing more certain than that a very small entrance, ⅜ by 4 inches, is too small for the bees either in winter or summer. The proper size of entrance for a strong colony in summer, according to my mind, is ¾ by 13 inches. When the bees are breeding in the spring, and the nights are cool, then the entrance should be small, but at no other time of the year.

With a large entrance, there should be a very small amount of upward ventilation allowed, and that through not less than 7 inches of chaff gently pressed down. Some fine chaff like

timothy is the best. It is thought that the cracks where the cover fits to the hive will let out sufficient air, unless very tight, but no large openings should be allowed in the cover. If put in loosely, the wet chaff on the surface, over the cluster, can be replaced with dry, three or four times during the winter; otherwise it will be liable to get moldy and create a bad odor. I do not, on this account, recommend a chaff cushion over the bees, because it would become quite foul before spring, unless more air was allowed to pass in and out of the cover than would be advisable. The point is, to allow no more upward ventilation than is necessary to permit the dampness coming from the bees to arise to the surface of the chaff. I should say, that if the chaff over the cluster was, after a time, found dry, that the ventilation through the cover was too free. For, in my opinion, the only benefit to be derived from upward ventilation is in allowing the dampness to pass upward at the same time that the heat of the bees is effectually retained, which it can be if there are no large openings in the cover.

The spaces between the frames should be covered with a cloth, a clean woolen cloth preferred. Sticks about ⅜ of an inch square should be placed crosswise of the frames to hold the cloth up so that the bees can pass over the tops of the frames. But I think that the bee-keepers will find to their cost that any device to hold the cloth up from the frames, so as to leave a large space, is a bad thing. However, a large space above the chaff is quite necessary.

Again, with so large an entrance it is necessary to leave a board against the front of the hive to keep out sunshine and wind. Or an alighting board 8 inches wide may have projecting arms 2 inches wide nailed to each end and fastened to the sides of the hive by two nails or wooden pins on each side, which can be taken out and the board lifted up and fastened to the body of the hive, so as to keep out sunshine and wind. This is a device that all bee-keepers will appreciate, and it is free for all to use. It will be attached to my *new hive* which I shall shortly introduce to bee-keepers.

In out-door wintering, all sides of the hive should be protected by 3 or 4 inches of sawdust or chaff, or the combs should all be taken out but five, and these should have passage ways cut through them and wooden tubes inserted. If this is not done the bees will often close up the openings made before winter sets in. Put a division board each side of the five combs, and fill the spaces between them and the sides of the hive with loose chaff. It will be found cheaper to do this than to make chaff cushions for the purpose. This latter method of protection is not easily carried out except in shallow hives, but it is believed to be cheaper than to use an outside case for a hive to be filled in with packing. The five combs should be spaced one-half inch apart, and contain not less than 5 lbs. of honey each.

Bees can be wintered in ordinary winters by various methods, but the great question with bee-keepers is, not what plans of ventilation and protection sometimes succeed, but what plan will secure the most "favorable conditions" so that the bees may be able to resist the vicissitudes of a very hard winter as well as a mild one, if it should happen to come. It is thought that the methods here given will secure these "conditions" as far as it is possible to afford them in out-door wintering. But I would place more stress upon the mode of ventilation and the management given than upon the amount of protection. Yet it would not do to abandon all protection, even if it could be done without loss, for the protection afforded will amply repay the time and labor taken to give it, in the saving of stores to the colony. It may be added, that the preparation of a hive of bees on the summer stand for winter requires as much, or more labor to do it as it should be done than to carry hives into cellars. Yet there is no doubt, in my mind, that out-door wintering will give the best results, unless at points far North, where the cellar or bee-house is preferable.

New Philadelphia, Ohio.

For the American Bee Journal.

How I Winter My Bees.

H. R. BOARDMAN.

Judging from the numerous articles in the bee papers upon the subject of wintering our bees, one would justly conclude that we ought to be able to surmount all of the difficulties that have heretofore existed, but from the numerous inquiries I have received of late upon that subject, it is evident that with the average bee-keeper, wintering is attended with much uncertainty, and disastrous losses are not uncommon even with those who have had many years of experience.

In view of these facts, I shall not attempt to tell you how to winter your bees, but will describe as well as I can how I winter mine, and in doing so, I am aware that I shall run against the pet theories of many very substantial bee masters.

The bee house in which I winter my bees will first claim a brief notice. The building is double-walled, packed with seasoned sawdust 12 inches thick, with sawdust also on the floor over-head, making it frost proof. It is divided into two or more rooms, one of which is used for an ante-room between the bee room and the outside, and also through which the air must pass before reaching the bees, and thus modifying it *a la* sub-earth ventilation.

The house I have used longest has three rooms, two in which to store the bees with the ante-room between. This room also contains a stove used for raising the temperature, expelling the moisture, and facilitating ventilation whenever occasion requires. A scuttle opens into the chamber from the ante-room. The chamber is ventilated by a window in each gable, all of which may be opened or closed at pleasure.

The ground floor is cemented upon a layer of pounded stone, and is as firm as a rock, thus preventing any disturbance by jaring.

The windows are small, and provided with shutters inside by which the rooms can be made perfectly dark. The doors are also double.

The hive I use is a deep 8-frame hive, flat, movable cover on top, open bottoms, ⅜ inch bee space on top of the frames under the cover.

I prefer that bees breed as late as possible, and go into winter with plenty of young bees, a good queen, and plenty of sealed stores gathered in the forepart of the season. I disturb them as little as possible late in the season, after they are disposed to become dormant.

I set them into the bee house as near Nov. 15 as the weather will permit, and let them remain until April 15, if favorable conditions can be maintained. I choose a cool, not a cold still day, having previously prepared the rooms by covering the floor with seasoned sawdust, then having lettered and numbered the hives with a piece of white chalk, so as to render mistakes impossible in setting them out on the same stands again. I take each hive up from the bottom-board or stand, and carry them into the bee house, and set them upon stringers previously placed there to receive them, so that when so placed the air has free access beneath the hives which are bottomless.

Having placed one row around the outside, I lay stringers on the top of these upon which I set another row of hives, and so on as high as I can conveniently set them. I use 2x4 inch stringers on the bottom, and one inch on top of the hives. A thermometer is hung in each room, and a careful record kept of the temperature in the rooms and also outside, visiting the rooms at least once each day for that purpose, noting also anything I may think important.

The hives are only ventilated at the bottom. The rooms are kept well ventilated, and at a temperature averaging near 45° somewhat below in the forepart of the winter, and above in the latter part. After being set in, the bees remain very quiet until sometime in February, unless disturbed by an unusual warm spell.

Sometime in February there will be a noticeable increased activity, and the thermometer will indicate a higher temperature. This is an indication that brood rearing has commenced. If the weather continues warm for a long time, and the bees become very uneasy, I sometimes set them out at this season for a flight, but consider it of no benefit if the temperature can be kept under control, which I endeavor to accomplish by opening the outside doors at night and close them in the day time.

I have observed that when the temperature is quite low for a considerable time, after brood-rearing has commenced, that a bad condition is

almost sure to follow, and dysentery and spring dwindling is often the result. Therefore, I am careful at this time to see that the temperature continues favorable for the brood, and the result is a hive full of bees when setting out in the spring, and a considerable portion of them young.

If the temperature is inclined to continue too low, I resort to artificial heat, and from several years experience, I am satisfied that there is no means of ventilation equal to it, and with judicial use I think it will always be attended with good results.

When the flowers of spring come and the bees can find employment gathering pollen and honey, I feel that the time has come to set them out. Then on a warm pleasant day I set them each out upon the stand from whence they were taken in the fall, and the warmer and pleasanter the weather the finer will be the condition of the bees. But if the weather is cold and damp, when they are set out, a bad condition will be induced however perfectiy they may have been wintered.

East Townsend, O., Sept. 24, 1883.

For the American Bee Journal.

The Problem of Wintering Bees.

JAMES HEDDON.

We have been told by some of our brothers in apiculture, that "cold" was the cause of dysentery in bees. When their "cold" theory was shaken up, a little of it had to go into partnership with "confinement" to make it stand up, and with a more thorough shaking they both fell to the ground. The same is true of the "confinement" theory put into company with "cold." Our friend, Dr. Tinker, struck out on the "humidity" or "dampness" theory, and one shaking has caused this to stagger up against the "cold," and if we continue the agitation, will they not tumble hand-in-hand?

Now, Mr. Balch's cellar, from whence came the damp and moldy hives all free from dysentery, was kept at a lower temperature than mine; so dry that sack salt would hardly show moisture, as several bee-keepers observed, and from whence came 45 out of 48 colonies dead with dysentery in its worst form, some of them dying within three weeks after being placed in there. Mr. Balch's hives were all damp and moldy *in side*, and neither the hives or the cellar had what bee-keepers at large consider sufficient ventilation to keep the air decently pure.

It seems that Dr. Tinker has a double team too, and while he calls the bacteria and pollen theories my double hobby-horse team, he has one of the bacteria and humidity.

Well, there is no sin in honestly trying to get at the bottom of this great question, each one in his own way; and while I respect the Doctor for his efforts, I find that his team is wonderfully mismated, that is, that the bacteria and humidity theory have no relation to each other, and do not look as much alike as a black Norman and a lemon-colored mustang, and worst of all, the Doctor seems to think it is quite likely that this radical, and ever the same effect, dysentery, has two very unlike causes. This, I do not believe for one moment. I cannot. In the case of my 48 colonies, I had them ventilated some above radically, some in a medium degree, and some but little, many not at all; some in hives 13 cubic inches, and some 13 square and 17 deep, and 9 in the Doctor's 10-frame Langstroth. Every one of which died among the first. The very first one being one of these 10-frame Langstroth hives with medium upward ventilation, and containing an Italian queen, for which I paid Adam Grimm $8.

Now, I do not believe that the shape of the hive, method of ventilation, or the queen of Mr. Grimm had anything to do in causing it, and in this dry cellar, where the mercury never went below the freezing point, and hardly below 44° F., neither or both combined could have produced it. Time after time have not only I, but scores of others had their apiaries terribly reduced by this malady, where neither cold nor dampness were present, nor Mr. Doolittle's long confinement. No; too many of us know that these theories are fallacious. Now, give your bees pure, properly prepared, refined cane sugar syrup in combs containing no bee bread, in such shape that they can reach it readily at all times, and then, if the disease mows down our colonies, as it has been doing, I will agree to run for president of an indignation society, which meets semi-occasionally to expatiate upon our universal ignorance. I have before shown how nearly alike is the pollen and bacteria theories. When producers get the sticky and doubly interesting habit of setting their sections down on the brood frames, I will make every effort possible to see that Dr. Tinker, of New Philadelphia, the introducer of the golden-honey plant, has the great credit that will certainly be due him.

Now, it is my turn to get into the quagmire of not comprehending how lots of top surface and surplus case room can work favorably to the safe wintering of bees, especially as so many bee-keepers have declared against the 10-frame Langstroth hive for this very reason, and further, because most of us still persist in removing our surplus cases at the end of the surplus season, and substituting in its place a box whose top surface room is more than 6,000 cubic inches, and yet the bees will get the dysentery and die. Nearly every year since I adopted the 8-frame Langstroth hive, I have been cursed with some 10-frame hives, and strange to say, they have fallen behind the average of my apiary, in wintering safely.

My opinion is this, bees are more inclined to let alone the nitrogenous food, bee bread, and use only the oxygenized food, honey, when they have the best of facilities to get at their stores at will. If the Doctor can tell us how bees can more readily get access to the adequate amount of food required to winter them, said food being distributed through ten combs instead of eight, then I will not only feel under obligations to him, but will go back and impoverish Mr. George and Katie Grimm, by showing them that their parent's bank stock accumulated from the use of bees in 8-frame hives is all a myth, because it is *now* clearly shown that said hives will not winter bees (though Adam beat all the bee-keepers of this country in safely wintering large numbers of colonies in his), nor are they well suited to surplus storing, though tons are annually coming from their tops, and the change from the 10 to the 8-frame hive is as sure as the trial is made.

I believe I ventured to predict that more than likely disease would catch the Doctor before old age overtook him and soothed him to sleep. I would rather it would be otherwise with all who live, but, alas, it is only the very rare exception. I do not ask, nor expect the readers to place any more confidence in my theories and statistics regarding this wintering problem than they do in my "amazing" little prophecy.

"There is a history in all men's lives,
Figuring the nature of the times diseased;
The which observed, a man may prophesy,
With a near aim, of the main chance of things,
As yet not come to life, which in their seeds,
And weak beginnings, lie untreasured."

Dowagiac, Mich., Oct. 3, 1883.

For the American Bee Journal.

Introducing Queens.

J. E. POND, JR.

From my own experiments, I am led to believe that queens may be introduced safely with far less trouble than is usually taken in the operation. If the conditions are right, queens may be allowed to run into hives without taking any precautions whatever, and will be accepted at once; unless the conditions are right, queens will not be accepted, no matter what precautions are taken.

We all well know that it is a great injury to a colony to be without a laying queen for several days, and if this can be avoided, very substantial gains will be made in the amount of the honey crop. That there is no absolutely safe method of introducing queens as yet discovered, is true; it is also true that it is very difficult to determine when the conditions are such that a queen will be accepted. In my experiments I have taken all these matters into consideration, and find that the occasional loss of a queen, made by introducing her at once when the old one is removed, is more, far more than counter-balanced by the gain in not allowing the colony to remain queenless an hour. I have particular reference to the time when honey is being gathered freely, as that is the time when the loss of a queen is severely felt. In introducing a queen, I now adopt no precautions whatever, except in early spring and fall, but simply remove the old queen, and allow the new one to run into the entrance.

My theory is this: Before removing the old queen, I give the colony a few puffs of smoke to quiet them. The bees at once fill themselves with honey, and are as amiable as one could wish; the bees coming in from the fields are filled with honey also, and the foragers besides are so occupied with their honey gathering propensities that they take no notice of what is going on inside the hives, and as the comb builders and nurses are all very young, they do not molest the new queen, even if they do take any notice of her. My theory may not be correct, but the fact is that I do not lose one queen in 10 by introducing in this manner.

When no honey is being gathered, queens cannot be introduced safely in this way. The old bees remain in the hive, and are terribly vexed at not being able to gather stores, consequently are ready to vent their spite upon any thing that crosses their path. I have, however, in several instances, introduced queens successfully in late fall, by the method advised by Mr. Simmins in the *British Bee Journal*, viz.: removing the old queen, and at once placing the new one upon the same place on the comb the old one was taken from. I am of the opinion that the actions of the new queen have, to a great extent, a bearing upon the matter of whether she is well received or not; if she is scared and runs from the bees, or shows any symptoms of terror, she will be pounced upon at once; otherwise she will hardly be noticed. My reason for allowing queens to run in at the entrance, as mentioned above, is that I think they are not as apt to show signs of fear, or by any acts of theirs cause the bees to see that they are strangers.

Perhaps I may be considered as decidedly heretical, but I have never been fully satisfied that colonies have any scent peculiar to themselves, by which they are enabled to distinguish visitors from members of their own colony. The idea has always seemed to me as somewhat fanciful; more particularly when I see that robbers are recognized before they touch the alighting board, and by their actions rather than by anything peculiar about them. I have often seen sentinel bees "go for" robbers, when they were nearly a foot from the entrance; and I have seen them oftentimes pounce upon a bee at the entrance, and finding it showed no signs of fear, allow it to go peaceably in when one that did show signs of fear (as robbers always do when pounced upon), was ruthless destroyed. This question of peculiar scent is a matter of opinion with me; but is it any more than a matter of opinion with others? If there is any evidence of the fact, if it is a fact, I hope yet to see it, and until I do, shall hold to my present belief.

Foxboro, Mass., Sept. 28, 1883.

☞ We carefully mail the BEE JOURNAL to every subscriber, but should any be lost in the mails we will cheerfully send another, if notified before all the edition is exhausted.

Western Bee-Keepers' Convention.

The Western Bee-Keepers' Association met at Independence, Mo., Sept. 20 and 21. The attendance was good, better than at any of the previous meetings of the association, and the first day's session was spent most pleasantly.

The morning passed in arranging the displays of bees, honey, extractors, hives and fixtures, and in a general social manner. At noon, those in attendance, were treated to an excellent repast by the ladies of the association. After dinner the tables were cleared and the association was called to order by its president, Mr. Jas. A. Nelson, Mr. P. Baldwin acting as secretary *pro tem.* The reading of the minutes was deferred until next day.

No preliminary remarks were made, and the association proceeded to the business in hand. The committee on subscriptions to a premium by the citizens reported an amount of $50 subscribed for the best 50 pounds of honey. The committee on premiums offered by the association reported as follows with names of exhibitors:

Class A—Best display of comb and extracted honey, 20 pounds each, $25; W.C.Haraldson and Jonathan George.

Class B—Best 25 pounds of comb honey, $10; W. C. Haroldson, Jonathan George and Miss R. A. Baldwin.

Class C—Best 25 pounds of extracted honey, $10; J. T. Sale, Willie Baldwin, W. C. Haroldson and Jonathan George.

Class D.—Best queen with her bees, $10; W. C. Haroldson and J. H. Fink.

Class E.—Best display of bee fixtures, Scoville & Anderson, Columbus, Kansas.

Those contending for special premium of $50 on exhibit of 50 pounds of honey, are L. W. Baldwin, Jas. Jones and P. Baldwin.

Class G.—Best package of comb honey, one year's subscription to the Independence *Sentinel*, Willie Baldwin.

The report of the committee was followed by the election of officers for the ensuing year, as follows: President, H. Scoville, Columbus, Kansas; Vice-President, G. W. Young, Lexington, Mo.; Secretary, C. M. Crandall, city; Treasurer, P. Baldwin, city.

No further business was transacted at the afternoon session.

Quite a number of the citizens joined the members in making the day's meeting a success. Among those present from other places were, Messrs. J. T. Sales, Jas. Jones and their ladies, of the country; Mr. John Long, of South Missouri; Mr. Jas. A. Nelson, of Wyandotte, Kas; Messrs. G. W. Young and C. F. Lane, of Lexington; Messrs. Scoville and Anderson, of Columbus, Kas., and also Miss Millie Scoville, of Columbus, Kas., who is a guest of Capt. Jas. D. Meador's family.

The second and last day's session of the annual meeting of the Western Bee-Keepers' Association was even more productive of discussion and general interest than the first day. The attendance was larger, and, all in all, the association may be congratulated upon its success at this the second meeting since its organization. The premiums were ample for the meeting, but with the present rate of increase in interest and and endeavors for success will necessarily be larger at the next meeting. More visitors were present yesterday.

On Thursday evening, at 8 o'clock, the association met for discussion with President Scoville in the chair. The evening, which was very satisfactorily spent, was opened by adopting a resolution, offered by Capt. Jas. D. Meador, to present a crate of the premium honey to the *Journal*. This was followed by voting a half crate of the premium honey to the Independence *Sentinel*, and also to the Independence *Progress*.

The President appointed Mr. P. Baldwin committee on statistics, Dr. G. W. Young occupied some little time in addressing the meeting. He was followed by President Scoville with his experience in bee-culture. Raising queens from worker eggs, and his method of swarming bees were the topics. To swarm bees he advised the taking of a small nucleus from each hive and strengthening from the stronger colonies from time to time.

The subject, "What causes comb honey to sweat and run," was discussed by Messrs. P. and L. W. Baldwin, J. D. Meador, G. W. Young, H. Scoville and C. M. Crandall. The conclusion was that it was caused by the bees sealing the honey before it was properly ripened.

Mr. P. Baldwin propounded the question, "What does the worker bee do with the honey when first brought into the hive?" The answering of the question was not fully arrived at, and the discussion was rather animated and engaged in by all the members. The best method of marketing honey was freely discussed by Messrs. Baldwin, Meador, Jones and Young, and was postponed for further discussion until next day.

Friday morning was occupied in a social way. The members took pains to explain all the fixtures and in exhibiting the fine display of honey to the many visitors who called during the day. At 1 o'clock dinner was served as on the previous day, and those in attendance were highly pleased at the efforts of the ladies who prepared the repast.

AFTERNOON SESSION.

President Scoville called the meeting to order shortly before 2 o'clock, and called for reading of the minutes of the previous meeting, which had been deferred. They were read and adopted.

The report of the judge who had awarded the premiums was called for, and read as follows, Mr. Jerome Twitchell, of Kansas City, officiating as judge:

Class A—Best display of comb and extracted honey, to W. C. Haroldson, Buckner, Mo.; premium, $25.

Class B—Best 25 lbs. of comb honey, to Miss Rosina A. Baldwin, Independence; $10.

Class C—Best 25 lbs. of extracted honey, to W. C. Haroldson, Buckner; $10.

Class D—Best queen and bees, J. H. Fink, Independence; $10.

Class E—Best display of bee fixtures, Scoville & Anderson, Columbus, Kas.; $15.

Class F—Special premium No. 1, by merchants of Independence, best 50 lbs. of honey, to Jas. A. Jones, Buckner; premium, $50.

Class G—Special premium No. 2, one year's subscription to the Independence *Sentinel*, Willie Baldwin.

The discussion of the best methods of shipping and marketing honey, followed the awarding of the premiums. It was engaged in by Mr. Jerome Twitchell, of Kansas City, who spoke at length, and was quite interesting, although he, as well as the others, was uncertain as to the best methods.

Mr. Phidel Baldwin, of the committee on statistics, reported as follows. The Table will explain itself:

NAMES.	No. of Colonies in Spring.	No. of Colonies in Fall.	Pounds of Comb Honey.	Pounds of Extract Honey.	Beeswax.
W. C. Haroldson	40	80	2000	150	...
Young & Lane	175	475	3000	500	100
J. H. Fink	3	8	.....	55	...
Elias Ellis	10	20	400	300	5
Jas. T. Lale	12	16	200	500	...
C. M Crandall	57	85	2000	800	25
Scoville & Anderson	135	150	.....	1500	...
L. W. Baldwin	175	230	8750	2750	50
Jas. A. Nelson	54	64	300	3700	25
Jas. D. Meador	20	54	.....	3000	100
Jas. H. Jones	85	110	5400	1200	46
Samuel D. Gregg	20	36	500	1200	50
F. J. Farr	125	150	4800	1500	15
Jonathan George	58	84	2300	1000	20
Phidel Baldwin	125	165	8500	1000	25
W. B. Thorne	18	30	400	900	...
Total	1112	1759	38850	19355	261

Jas. A. Nelson, Wyandott, Kas., and Scoville & Anderson, Columbus, Kas., reported that they were principally in the queen rearing business.

On motion, the President appointed Messrs. Phidel, L. W. Baldwin and Jas. H. Jones a committee on marketing of honey.

At 4 o'clock the second annual meeting of the Western Bee-Keepers' Association adjourned, to meet at a semi-annual meeting on the last Thursday in April, 1884.

C. M. CRANDALL, *Sec.*

H. SCOVILLE, *Pres.*

For the American Bee Journal.

Central Michigan Convention.

The Central Michigan bee-keepers held a meeting in the Pioneer room, in the State Capitol building, on Sept. 25; about 20 members were present. President Ashworth occupied the chair. S. Hilbert, of Lansing, was made a member.

In discussing the best methods of wintering, J. M. Harper, who had looked upon the celler, as the best plan, confessed to a change of mind. He found it difficult to secure proper ventilation in the cellar, and would winter a part of his bees in chaff hives; he believed, upon the whole, that there is less risk in wintering in chaff hives than in the cellar.

Prof. Cook thought the entrance to the hive should be nearly closed, at this time of the year, so as to keep the brood from chilling. He also said that a great many of our best bee-keepers are using finer packing, such as timothy, chaff, and very fine sawdust; he did not want oil-cloth over his bees at any time; he also said that in cellar wintering the bees ought not to be taken out before April 5, and, in preparing them for winter, he would take away all the pollen he could.

J. M. Harper thought it time now to prepare for winter.

A. Gregory thought it too early, as there would be danger in not leaving honey enough.

Superintendent I. N. Smith, and Secretary B. B. Baker, of the Central Michigan Agricultural Society, were present, and stated that suitable arrangements had been made for an exhibit of bees, honey and apiarian supplies at the coming Fair.

Prof. Cook recommended an application of ammonia or sal soda for bee stings.

O. Wilson endorsed the ammonia remedy.

On the question of profit, Mr. Hilbert thought bees as profitable as any investment he could make.

W. B. Stone & Co., had a fine display of hives, extractors, smokers, and comb foundation, and stated that they had sold during the season, 150,000 of the all-in-one-piece sections, and about 700 of the Baker hives.

The next meeting of the Association will be held at the same place in Lansing, April 18, 1884.

E. N. WOOD, *Sec.*

Lansing, Mich.

For the American Bee Journal.

Experiments in Introducing Queens.

A. M. HOGLE.

I bought 2 colonies of black bees to manipulate while learning my first lessons in bee-keeping, transferred them to Langstroth hives in May, 1883, which were the first movable frame hives that I ever saw. In June I tried to Italianize them; 48 hours after I put the first Italian queen in the hive, I let her out of the cage, and the natives balled her; I re-caged the queen, but in 24 hours more they had cut under and killed her. The second Italian queen arrived dead; for the third, I selected 5 frames of hatching brood (brushed the old bees off), put them in a new Langstroth hive with my fine queen, and the ants destroyed the queen and colony. The fourth and last queen came in a 3-frame nucleus colony. I have 8 fine queens from her, and 3 queens from my 2 blacks, which make me 1 Italian, 8 hybrids, and 5 black colonies, making 14 colonies in all; increased only 11. My box hive and log gum neighbors have done well. Mr. B. had 4 colonies, increased to 5; Mr. R. 1 colony, and no increase; Col. B. 25 colonies, increased to 26; Mr. M. 1 colony, and no increase; Mrs. R. 2 colonies, and no increase; Mr. G. 23 colonies, increased to 25; Mr. W. 3 colonies, and no increase; spring count, 59; increase, 4. Somd of them are almost persuaded to take the BEE JOURNAL and adopt the Langstroth hive.

Morgan, Texas, Sept. 27, 1883.

For the American Bee Journal.

Bee-Keeping in Bucks County, Pa.

J. E.

I enclose a flower and stem of a weed that grows in our fields at this time of the year, and has several shoots. Yesterday I counted 16 Italian bees working on a bunch at the same time, and the humming of the bees among the flowers of that weed, sounds like it does in May. What is its name? Does it produce honey abundantly, and of what quality? as the bees seem to work on it from early morning until late in the evening.

Bees in this section of the country, as far as I have heard, have done well for the season. The forepart was very wet, the latter part very dry. Surplus comb honey has been taken abundantly, and retails at 25 cents readily; but no extracting is done in this neighborhood, where box hives are mostly used; some have reported an average of 50 pounds to the hive. I cannot report, this season, anything on my apiary, as I have transferred my bees from old hives to movable frames, and introduced bees from the apiary of D. A. Pike, of Smithsburg, Md., and I think they are the best and gentlest bees to handle, and are as good honey-gatherers I ever saw during my 25 years of keeping bees. I procured over 30 pounds from one hive, from May 1, 1883, to June 1, 1883, after turning them upside down.

These last two months being so dry, the bees do not seem to store any surplus from fall flowers, but seem to have plenty of sealed honey in the body of the hive, and take what they gather at present for brood-rearing, as there seems to be more for this month than I have seen in several years, for the same month.

The Italians have not been clear of drones this season; they are flying every day, while the blacks disappeared in July.

Fallsington, Pa.

[It is an aster; it yields honey abundantly, and of fine quality.—ED.]

For the American Bee Journal.

Desiccated Foul Brood.

H. L. JEFFREY.

I send, by mail, a sample of that species of foul brood that I have tried so hard for the past five years to obtain some information about, from other bee-keepers, without any result.

The larvæ turns yellowish brown, and then dries up and leaves a dirty sediment in the cells. My attention was called to it on Monday, Aug. 3.

It is not usually noticed till the colony has all dwindled down. The queen keeps laying in the combs nearly as well as usual, but the third or fourth lot of brood does not mature as much as the preceding ones, and if a comb is taken from the hive and given to healthy colony, every comb will be more or less affected with it in two or three months, and it will spread all through the apiary in one or two seasons, according to the number of colonies. The infection seems to stay in the hives unless they are thoroughly washed inside with salt and vinegar. In 1880 and 1881 I saw 25 colonies in one yard ruined by it. I have known of its ravages since 1878, in different parts of this State. I never have had but three or four hives troubled with it, and those were in an isolated apiary for the purpose of experimenting, but it has shown itself in several apiaries where there has been a large amount of bare-headed brood, during the previous season.

I have been as far as 35 miles, by request, to examine colonies that I have found it in, and found it the cause of the colonies being depleted to a serious extent. I am sure it is as much to be dreaded as the malignant foul brood, because it is not as easily detected in its first stages, and for that reason it easily and surely gets the upper hands of the novice, and its ravages get a good foot hold.

Please to examine the specimen as closely as possible, and call the attention of the best informed apiarists to the subject. I am ready to give all the information I possess on the subject, and would like the opinion of others. Perhaps if the specimen was examined by some competent apiarists, it would be more thoroughly investigated.

Washington Depot, Ct.

[We have had no experience with foul brood in any form, but will try to get the opinion of those who have, at the Convention here next week.—ED.]

For the American Bee Journal.

Bees Injured by Heat, etc.

J. D. ENAS.

Under the heading of "Bees Injured by heat," Mr. M. Bragg seems to think that my bees suffered from not being properly shaded. Most of my hives are not shaded, though I am not opposed to shade for hives; I have planted some trees for that purpose, and have used the live oak for shade, but do not observe any difference in the result. When bees cluster at the entrance, I find out the reason at once, and attend to it.

My hives are the Muth-Langstroth, with false ends, for the frames in the second story, which gives an air space at the ends of frames, and prevents the combs from melting, and the overheating of the brood. It is a long time since I had any combs to melt from heat. I use a piece of burlap on the top of the frames, which absorbs moisture, and keeps the top of the hive cool in warm days. I also raise the top and also the hive from the bottom board, if needed.

On the last of December, 1882, we had a down-East snow storm; snow was six inches deep on a level, with frost in the evening. Previous to that our season was warm, and fruit buds were nearly in bloom. One could see the pink lining to the cherry buds. Many of our fall and winter flowers were in bloom; even blue sage, which was killed by the snow and subsequent frost. The snow did not last 48 hours. The Manzanita, which was in full bloom, was cut short. Fruit buds that were about to burst were checked, and none too soon, for every thing would have been killed. All tender plants were killed to the ground; even the live oaks shed their leaves, some entirely, which is unusual, and which I have not seen before, during a residence of more than 31 years in this State.

In February again, during a warm spell, the Sage bloomed, to be again caught by frost, which checked the rearing of brood. Having plenty of combs of sealed honey, I uncapped it and gave it when it was most needed. We had a good many cool and sudden showers until May, when the bees were booming again, though the weather was very bad for queen rearing most of the spring, as it seemed to rain just when one expected a lot of queen cells to hatch, or a lot of young queens to be fertilized.

Early in June we had north winds which dried up vegetation, injured the bloom and young fruit, and put another check on the honey flow, and the effect was felt the balance of the season throughout the State.

Our climate is not the same as at Mr. Bragg's place, which is probably 100 miles, or so, further south. The highest marked by the thermometer was 102°, and that for one day only. That was the only time that the bees left the combs; but by raising the hive from the bottom board, they soon went inside. I used the entrance of the whole width of the front of the hive. I am of the same opinion as Mr. Bragg, that a double-walled hive will suit this climate. I think the dead-air space an improvement, to guard against over-heating.

Queens stopped laying from 4 to 6 weeks, but are building up, at the present. I had to feed 100 pounds of sugar. They are doing better now, and prospering. The frost stopped the supply of pollen.

At the time my bees were getting reduced, they did not seem to be bringing in pollen, and by feeding them honey liquefied, I induced robbing more than I cared for (although I had a bee tent). After using all means to stop robbing without success, I made a lower story to the hive, only 1½ inches high, well ventilated with double-wire cloth over the ventilators, with a trap for entrance, so that the bees could go in, but not get out. I set the hive on that, and closed all the openings except the entrance.

I had a hole one-half way up, in front of the hive, and closed with a plug. When the robbers were very thick at the entrance, I opened the upper hole, and they would stream in, in a solid body; when most were in, I closed the hole. In this way I got a strong colony. I then placed an empty hive on the stand, and removed the hive with bees, shaded them for several days, and put them on their stands after dark. The next morning they were ready to defend what they had before robbed. I think the other hives were more than the loser. This is the worst season I have seen since 1877.

Napa, Cal., Sept. 17, 1883.

For the American Bee Journal.

Ohio Convention.

The Ohio Bee-Keepers' Association held a meeting at Columbus, O., from Sept. 3d to 7th inclusive, during the Ohio State Fair, at which time several questions of importance were discussed, among which was the subject of Queen Rearing and Management, by A. Benedict, of Benington, O.

Also by S. D. Riegel, of Adelphi, O., on Rearing Queens from Larvæ, Rearing Queens in Small Nuclei, and Putting Queens with Swarms at Swarming Time, etc.

A question was asked and not satisfactorily answered, Will a Colony Swarm without Drones?

Many other questions of importance were discussed.

An interesting lecture was delivered by Dr. Besse, of Delaware, O.

I must not close this report without thanking the Ohio State Board of Agriculture for the interest they have taken in the advancement of bee-culture, by the liberal premiums paid, and suitable buildings provided for the display of honey and all kinds of bee appliances, of which there was a very good display by Dr. Besse, S. D. Riegel, A. Benedict, Mr. Drum and many others.

The meeting adjourned to meet some time during the winter, of which due notice will be given.

C. M. KINGSBURY, *Sec.*

☞ The fall meeting of the New Jersey and Eastern Bee-Keepers' Association will be held in the city of New York, at the Cooper Union, on Wednesday, Nov. 7, 1883.

J. HASBROUCK, *Sec.*

Bound Brook, N. J.

☞ The Lorain County Bee-Keepers' Association will meet at Oberlin, Ohio, on the last Tuesday in October, 30th.

O. J. TERRELL, *Sec.*

Advertisements intended for the BEE JOURNAL must reach this office by Saturday of the previous week.

☞ Do not let your numbers of the BEE JOURNAL for 1883 be lost. The best way to preserve them is to procure a binder and put them in. They are very valuable for reference.

What and How.

ANSWERS BY

James Heddon, Dowagiac, Mich.

☞ If I understand correctly, this department is not expected to occupy very much of each number of the Weekly. It is, in my judgment, intended to be filled with these questions, that are of such a nature that short answers may be full and comprehensive. There is an old adage that makes the following new one true. A moment may ask questions that hours cannot answer. For instance, "A Friend's" first question is exactly adapted to the department. His second will do.

Mr. Tongue's, in my opinion, is out of place here. It would take a long and comprehensive article for me to reply to it satisfactorally to Mr. T., and then some one else would call it all moonshine.

None but the author should dictate the subject for articles. Articles to be of most value, should have some inspiration about them. Inspiration (excelerated circulation), will not bear dictation.

How is this, Mr. Editor, am I not correct? You made this department, and had it all before my eyes, in print, before I dreamed of such a thing.

J. H.

[Mr. Heddon is quite correct. The department was intended for terse replies, of general interest, and not for a special description of articles, used by Mr. Heddon, or for captious questions regarding any of his "hobbies," for every man has more or less of them.—ED.]

Spaces Between Tiers of Sections.

Will Mr Heddon please answer? 1. How much space do you allow between the tiers of sectiens in your case?

2. About what per cent. of your sections can you get straight enough to glass?

A FRIEND.

ANSWERS.—1. Scant ⅜ of an inch.

2. Without separators, we can get 5-6 of our sections straight enough to glass, if we glass them on the outside of the wide pieces, *a la* Moore; but if on the outside of the narrow pieces, and within the wide side pieces, then only a small portion, and were I bound to glass my sections in this style (prize), I should use separators.

How to Successfully Winter Bees.

Will Mr. Heddon please tell how to winter bees successfully in the "What and How." It will be a favor thankfully received. Please give *modus operandi* in detail. L. N. TONGUE.

Hillsborough, Wis., Sept. 22, 1883.

ANSWER.—While I appreciate the fact that Mr. Tongue values my knowledge of the wintering problem, I wish to say that the best I can do for him now, is to refer him to my illustrated article in one of the October numbers of the Weekly for 1882. I am now making some extensive experiments in wintering, but of these cannot report much yet.

Sections and Cases.

Will Mr. Heddon please answer the following question in the BEE JOURNAL:

1. Is your section 2 inches wide or 1¾ inches?

2. How is the Heddon section case made?

3. Can the section be glassed as easily as if separators were used?

J. F. SELLERS.

Reynolds, Ill., Sept. 11, 1883.

ANSWER.—1. We are this year experimenting with sections 1⅛, 1¼ and 2 inches wide; they please us just in proportion to their width—preference being for the narrowest.

2. Our case is a shallow box, with open top and bottom, 4⅝ high, of the length and breadth of the hive they are to be used on, with partitions and a tin strip on the bottom to support the sections. The minutia is out of place here, and you should not attempt to make any number without a sample.

3. The sections cannot be glassed as readily as those built between separators.

SELECTIONS FROM OUR LETTER BOX

Best Honey Season for Years.

We have not had time to take off all our honey yet. There are at least 2,000 pounds yet in the hives. We have had the best season for honey that we have had for some years. Bees are now working briskly. Our bees will be in splendid condition for winter quarters.

S. VALENTINE & SON.

Hagerstown, Md., Sept. 28, 1883.

Fall Honey in Texas.

We have had a very good rain down here, and grass has started up. The bees are doing very little, working on scattering wild flowers.

M. C. GRANBERRY.

Austin, Texas, Sept. 30, 1883.

Good Qualities in Bees.

On page 480, I noticed the following list of qualities which should be sought in bees: 1. Good honey gatherers. 2. Hardy to winter. 3. Easy to handle. 4. Yellow bands. Please tell us of what value is the fourth requisite to these perfect bees. It seems to us that to the three first qualities should be added, good comb builders, and the instinct to protect themselves from robbers, moths, etc. There may be many other valuable qualities, such as prolificness, but we can see no possible use of "yellow bands," Had the writer said "iron bands," we might have thought he wanted them to keep the over-loaded bees from bursting. If these "yellow bands" are something of that kind, we hope the phenomenon will be explained. JOHN KING.

Fowler, Ohio, Sept. 28, 1883.

[The remarks about "iron bands" are, of course, simply "*irony*"—nothing more.

Yellow bands merely add to the *beauty* of the bees; and, though this is always a welcome feature, the qualities named above, for comb building, prolificness, etc., are more essential.—ED.]

Those Large Yields.

Please ask, through the BEE JOURNAL, of those giving large yields from one colony, to give a description of their hive, the surplus honey, kind of bees, if doubled in the spring, how much, whether fed or not, if fed, when and how much; also the treatment from Nov. 1, 1882, to the time of their report. T. J. TIFFANY.

Brooklyn, Pa., Sept. 30, 1883.

Asters as Honey Plants.

I send a sample of one of our honey plants, and would like for Prof. Cook to give us the name of it through the BEE JOURNAL. It generally grows about 4 feet high, and sometimes 6 feet. It has been in bloom ever since Sept. 1, but it is about out now. The bees have worked on it splendidly, and stored a nice lot of honey, putting them in fine condition for winter.

A. R. NISBET.

Dobyville, Ark., Sept. 29, 1883.

[It is one of the innumerable asters, which are among our most excellent honey plants. The honey is also of excellent quality.—A. J. COOK.]

Satisfied with Honey Crop.

I have just taken off the last honey of the season, and put my bees into winter quarters by putting a large chaff cushion in my chaff hives, as I remove my crates. It may seem a little early, but my experience is, that it does not hurt them to have plenty of time to arrange for their "long winter nap." I found an unusual amount of brood and honey in the brood-chamber, for the time of year. Our fall honey was cut short by the drouth and early frosts, but my sea-

son's report is as follows, and I am satisfied: Spring count, 35 colonies; in winter quarters, 57 colonies; comb honey, 2,008 lbs.; extracted honey, 1,114 lbs.; total, 3,122 lbs. I hope to be able to attend the Chicago Convention.

GEO. E. HILTON.

Fremont, Mich., Oct. 3, 1883.

Fall Honey from the Asters.

Please find enclosed a flower that is just in full bloom now. It has been in bloom for about ten days; the frost does not seem to injure it. Bees are working on it very lively, and they are storing boney in good style yet. Please give it a name through your welcome BEE JOURNAL.

D. B. BROWN.

Des Moines, Iowa, Sept. 27, 1883.

[It is one of the asters—all are excellent honey producers.—ED.]

Bee and Honey Exhibit.

We had quite a nice honey exhibit at the Portage County Fair. Mr. Page, of Streetsborough, and Mr. Converse, of Ravenna, were the exhibitors. Mr. Page had a tent made of wire screen covering his bees. Mr. Converse took out the side of his hive and put in glass, so that they could see the bees. He took the prize for a hive; also, on the best colony of bees; also on some honey.

B. HARDING.

Kent, Ohio, Oct. 1, 1883.

Bee Killer.

I send a specimen of fly caught with a bee in its forceps. They are exceedingly swift on the wing, and cannot be kept sight of more than a couple of rods away. Are they the "bee killers" spoken of in the BEE JOURNAL?

JAS. POINDEXTER.

Bloomington, Ill.

[Yes; it is the *Asilus Missouriensis*, or bee killer.—ED.]

☞ The sixth annual meeting of the Northern Michigan Bee-Keepers' Association will be held at Stone's Opera Hall, Sheridan, Montcalm county, Mich., on Tuesday and Wednesday, Oct. 9 and 10, to open at 10 a. m. of the first day. Evening sessions will be held, which will be interesting. At our last meeting it was requested that all interested in apiculture attend, and all who would, and could, furnish for exhibition apiarian supplies in the way of hives, extractors, implements used in the apiary, honey, honey-producing plants, and anything that would be interesting to a bee-keeper. Ample arrangements have been made to entertain all who will come. Let us have a general turn out, and see what we can learn one of the other. It will be a dull scholar who cannot profit by such a gathering. Feel assured we shall have an interesting time.

GEO. W. STANTON, *Pres.*

O. R. GOODNO, *Sec.*

Special Notices.

Examine the Date following your name on the wrapper label of this paper; it indicates the end of the month to which you have paid your subscription on the BEE JOURNAL.

For safety, when sending money to this office get either a post office or express money order, a bank draft on New York or Chicago, or register the letter. Postage stamps of any kind may be sent for amounts less than one dollar. Local checks are subject to a discount of 25 cents at Chicago banks. American Express money orders for $5, or less, can be obtained for 5 cents.

We wish to impress upon every one the necessity of being very specific, and carefully to state what they desire for the money sent. Also, if they live near one post office, and get their mail at another, be sure to give us the address we already have on our books.

How to Create a Market for Honey.

We have now published another edition of the pamphlet on "Honey as Food and Medicine," with more *new* Recipes for Honey Medicines, all kinds of cooking in which honey is used, and healthful and pleasant beverages.

We have put the price *still lower*, to encourage bee-keepers to scatter them far and wide. Single copy **5** cents, postpaid; per dozen, **40** cents; per hundred, **$2.50.** 500 will be sent postpaid for **$10.00**, or 1,000 for **$15.00**. On orders of 100 or more, we will print, if desired, on the cover-page, "Presented by," etc., (giving the name and address of the bee-keeper who scatters them). This alone will pay him for all his trouble and expense—enabling him to dispose of his honey at home, at a good profit. Try it, and you will be surprised.

Subscription Credits.—We do not acknowledge receipt of each subscription by letter. The label on your paper, or on the wrapper, shows the date to which your subscription is paid. When you send us money, if the proper credit is not given you, within two weeks thereafter, on your label, notify us by postal card. Do not wait for months or years, and then claim a mistake. The subscription is paid to the end of the month indicated on the wrapper-label. This gives a statement of account every week.

Trial Trip—25 Cents.

As the season for Fairs has arrived, and wishing to be able to reach several thousands of the old-fashioned beemen, and by the aid of the BEE JOURNAL to lift them up to higher ground, adopting newer methods and progressive ideas, we make the following very liberal offer: We will send the Weekly BEE JOURNAL till Dec. 31, *on trial, for 25 cents.* In order to pay for getting up Clubs, we will give a copy of Fisher's Grain Tables, or Scribner's Lumber and Log Book, to any one who will send us five trial subscriptions (with $1.25); for a club of *ten* we will give a cloth copy of Bees and Honey; for a club of 15, a cloth copy of the 7th edition of Cook's Manual of the Apiary; for a club of 25, we will present both the Manual and Bees and Honey. If any one wants these Books for nothing, here is on excellent opportunity to get them for a little exertion.

The Apiary Register.

All who intend to be systematic in their work in the apiary, should get a copy and commence to use it.

For 50 colonies (120 pages).....$1 00
" 100 colonies (220 pages)..... 1 50
" 200 colonies (420 pages)..... 2 00

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable ones.

Bee Pasturage a Necessity.—We have just issued a new pamphlet giving our views on this important subject, with suggestions what to plant, and when and how. It is illustrated with 26 engravings, and will be sent postpaid to any address for 10 cents.

☞ When writing to this office on business, our correspondents should not write anything for publication on the same sheet of paper, unless it can be torn apart without interfering with either portion of the letter. The editorial and business departments are separate and distinct, and when the business is mixed up with items for publication it often causes confusion. They may both be sent in one envelope but on separate pieces of paper.

☞ To give away a copy of "Honey as Food and Medicine" *to every one who buys a package of honey* at Fairs, will sell almost a fabulous quantity of it.

Our Premiums for Clubs.

Any one sending us a club of **two** subscribers for 1 year, for the Weekly, with **$4,** will be entitled to a copy of Bees and Honey, in cloth, postpaid.

For **three** subscribers, with **$6,** we will send Cook's Manual, in paper, Emerson's Binder for the Weekly, or Apiary Register for 50 colonies.

For **four** subscribers, with **$8,** we will send Cook's Manual in cloth, or Apiary Register for 100 colonies.

For **five** subscribers, with **$10,** we will send the Apiary Register for 200 colonies, Quinby's New Bee-Keeping, Root's A B C of Bee Culture, or an extra copy of the Weekly BEE JOURNAL for one year.

To get any of the above premiums for the Monthly BEE JOURNAL send double the number of subscribers, and the same amount of money.

Preparation of Honey for the Market, including the production and care of both comb and extracted honey instructions on the exhibition of bees and honey at Fairs, etc. This is a new 10 cent pamphlet, of 32 pages.

Emerson Binders—made especially for the BEE JOURNAL, are lettered in gold on the back, and make a very convenient way of preserving the BEE JOURNAL as fast as received. They will be sent, post-paid, for 75 cents, for the Weekly; or for the Monthly, 50 cents. They cannot be sent by mail to Canada.

Books at Fairs.—Those who make an exhibit at Fairs will find that an assortment of Books and Pamphlets would sell and leave them a profit for handling. We will send such, postage prepaid, at 25 per cent. discount; or if the purchaser pays express charges, we will supply any of our own publications at 40 per cent. discount.

☞ The new two cent rate of postage for letters went into effect on October 1. Three cent postage stamps will now be but little used. For all fractions of a dollar sent to us hereafter we should prefer either *one-cent*, or else five or ten-cent postage stamps, or a Postal Note. Do not send coins in any letter.

Fairs.—To any one exhibiting at Fairs, we will send samples of the BEE JOURNAL and a colored Poster, to aid in getting up a club. The Premiums we offer will pay them for so doing. For a club of 8 subscribers to the Monthly BEE JOURNAL, or 4 Weekly, we will present Dzierzon's Rational Bee-Keeping, price $2.00.

☞ May we ask you, dear reader, to speak a good word for the BEE JOURNAL to neighbors who keep bees, and send on *at least one new* subscription with your own? Our premium, "Bees and Honey," in cloth, for one *new* subscriber to the Weekly, or two for the Monthly, besides your own subscription to either edition, will pay you for your trouble, besides having the satisfaction of knowing that you have aided the BEE JOURNAL to a new subscriber, and progressive apiculture to another devotee.

Ribbon Badges, for bee-keepers, on which are printed a large bee in gold, we send for 10 cts. each, or $8 per 100.